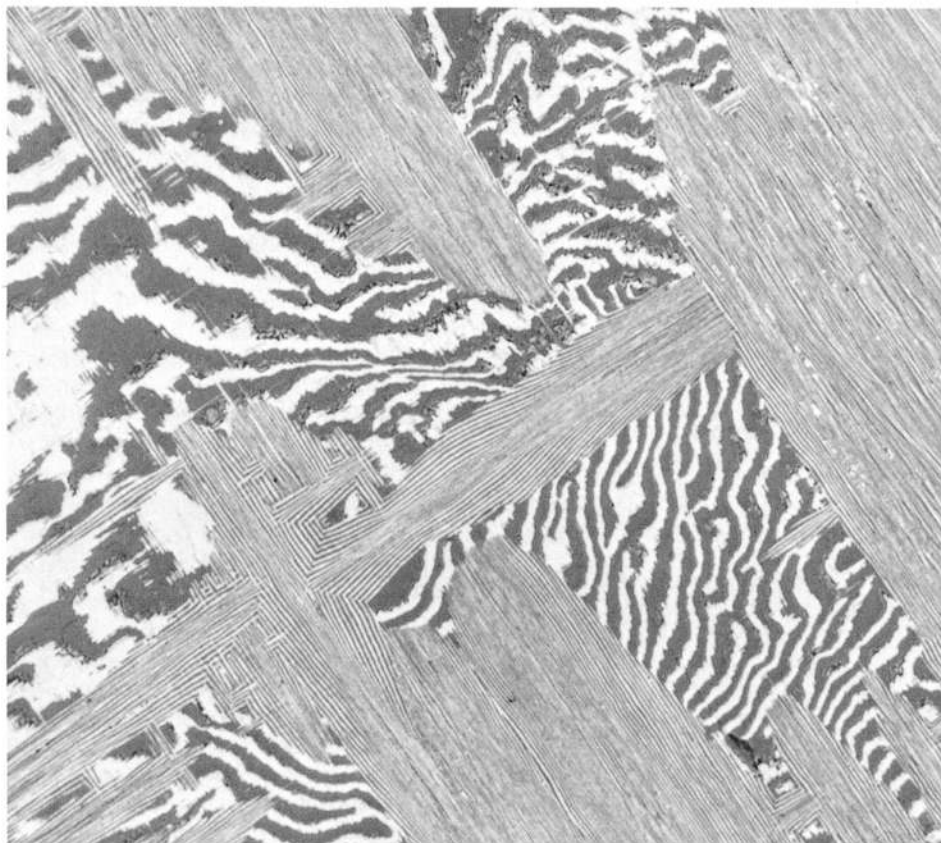


Nuclear Division News



A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 8/No. 24 December 8, 1977



NO ZEBRA STRIPES—This is what dark uranium monocarbide looks like photographed 259 X, using a photomicrograph. Bill Leslie, General Metallography at ORNL, says this microstructure shows the different grain boundaries after acid etching. Photomicrography has greatly aided the metallurgist in studies of the structure and behavior of metals and other materials.

The corporate world . . .

A NEW PROCESS FOR MAKING low-density polyethylene that requires only half the capital and a quarter of the energy needed by current methods has been announced by Union Carbide Corporation. Union Carbide will install nearly a billion pounds a year of new polyethylene capacity based on the new low-pressure process by 1982, officials stated. The initial phase

of the expansion program, slated for completion in 1980, calls for the construction of a new 300 million pounds-per-year facility, together with a new 500 million pounds-per-year plant at an as yet undisclosed Gulf Coast location and an additional 150 million pounds-per-year expansion at Seadrift, bringing new process capacity to 950 million pounds by 1982.

in this issue . . .



More and more people are utilizing wood in this area for house heating, and the wood cuttings on the Oak Ridge areas have become very popular. A recent seminar at ORNL pointed out many of the safe ways a chain saw may be used. In the right hands, it is a highly useful tool, but it can be dangerous, and many of these dangers are pointed out on page 2.

Other features:

- Question Box..... page 3
- ORGDP in-house training page 4
- Medicine Chest..... page 7
- Promotions..... page 8

Y-12 engineer seeks aid in Eye Bank drive for wills

How would you like to do something for somebody else that doesn't cost you a penny?

Y-12 Engineer Lon W. McNeil has been involved in such a project for a number of years. As president of the East Tennessee Eye Bank, he points out that cornea transplants are almost routine these days. "It can restore sight to people who have never seen in their lives. Or it can give hope to people with otherwise incurable disorders."

All that is involved is a legal document where your eyes are willed to the Bank after your death. A simple procedure called "enucleation" removes the cornea from its enveloping sac, leaving no disfigurement or damage. And no matter what your age or the condition of your eyesight, your cornea is usable if it has not been damaged. McNeil has the "will" forms and will be happy to supply anyone with the document.

(Old-time Y-12ers will remember Lou Doney's interest in this project at the time of death in 1971.)

Active 'Lion'

Long active in the Lion's Club, McNeil has served in practically every office they have in the Fountain City den. Before becoming involved in the Eye Bank, he was president of the Orthoptic Service, which performed a similar service.

The Eye Bank's new building in West Knoxville, dedicated last month, is of particular pride to McNeil. He

was not only instrumental in raising a great deal of the money required, but his son, Greg, designed the structure.

McNeil and his wife, Shirley, live at 5512 Crestwood Road, Fountain City. They have three other children, David, Jim and Becky.

McNeil, a native of Hampton, Tennessee, joined Union Carbide in 1951 after working in field engineering, heating and ventilating for Bondurant Brothers, and in tool design for Fulton-Sylphon. He attended the University of Tennessee.

Blindness has always been dreaded by man. Almost all of us have wondered what it would be like to be without sight.

One of the reasons we so greatly fear blindness is that we all know someone who has lost his or her eyesight or is having serious vision difficulties. In the United States alone, blindness is rising at a rate far exceeding the population growth; blindness has more than tripled since the 1940s. There are 416,000 people totally blind, and an additional 1.5-million who are blind in one eye. Each year 32,700 persons lose their sight.

The cornea is the "window to the eye" and not all ailments are curable with a transplant. But a great many are... more than the donor list provides.

List grows

McNeil points out that at present there are 22,000 on the donor list. "It would be ideal to have everyone in East Tennessee signed up," he says,

(Please turn to page 8)



STAFF MEMBERS—Activities at the Eye Bank keep staff and volunteers alike busy. Betty McClagherty, Lon W. McNeil and Dr. William Sullivan check a recent addition to the waiting list for a cornea transplant. 'The need always exceeds the availability of corneas.'

Seminar gives chain saw safety advice



Dennis Bradburn shows sharpening techniques

More than 40 persons attended the November 19 Chain Saw Safety Seminar at ORNL. All but 10 were Nuclear Division employees, although the seminar was open to the public.

As part of the seminar, Dennis Bradburn, head of the Nuclear Division's Forest Management program, presented a lecture which included information on types of chain saws and accessories, as well as information on their proper maintenance, handling and use. The lecture was followed by demonstrations of correct cutting, felling, limbing and bucking techniques. This session was held in the woods near ORNL.

Another seminar probably will be held after the first of the year for those persons who were unable to attend this one.

saw safety. . .

- When purchasing a chain saw, obtain handling instructions and owner's manual.
- Before starting the saw, check tension, sharpness and oiler.
- When fueling the saw, don't smoke, avoid spills, use an approved safety fuel can and wipe the saw clean after each fueling.
- When carrying the chain saw uphill, point guide bar to the rear; for downhill movement, point guide bar forward with motor off and chain guard in place.
- If possible wear hard hat, safety glasses, ear plugs, safety toe boots and snug-fitting clothing.
- When starting the saw, place it on ground with bar free from debris.
- Keep immediate operating area clear of individuals, including self, and maintain a safe distance (200-250 feet) from other operators of chain saws.
- When felling a tree, make sure you have a firm footing, use push stick to direct tree fall, light metal or wooden wedges and have a safe escape route.
- While cutting, maintain positive control of the saw by keeping both hands on it at all times and using the bumper guide.
- When bucking (cutting wood into lengths), remain on the uphill side of the wood, remove saw from cut with chain running, cut tension wood before compression wood and beware of flying splinters.
- Move the chain towards the end of the bar when sharpening the saw.
- Transport saw properly stored in case.
- Never attempt to communicate with others above the noise of the saw.
- Stop the saw motor before making any adjustments or doing any maintenance. Think safety.

anniversaries . . .

ORNL

30 YEARS

William B. Cottrell, Engineering Technology; Willie B. Towns, Industrial Safety and Applied Health Physics; Julian R. Gissel, Operations; George H. Johnstone, Plant and Equipment; Gerald Hamby, Instrumentation and Controls; George A. Hamilton, Instrumentation and Controls; and Frank C. Sims, Instrumentation and Controls.

25 YEARS

Percy A. Staats, Duke R. Frizzell, James M. Galloway, Eugene V. Dawson, Harvey R. Beatty, W. H. Shinpaugh Jr. and Artie L. Holloway.

20 YEARS

William O. Harms, John M. Holmes, John H. Spence and Alvia E. Kerr.

Y-12 PLANT

30 YEARS

Glen R. Walls, General Shops; Simuel J. Hudgins, Utilities Administration; and Julia L. Butler, Laboratory Operations.

25 YEARS

David E. Bailey, Milton Patterson, Buford W. Rea, Arvil L. Skaggs and Simeon W. Swicegood.

20 YEARS

Maxie F. Dukes, Robert B. Barker and John H. Householder.

ORGDP

30 YEARS

Millard C. Hanshaw, Shop Services Department; Albert N. Jackson, Fabrication and Maintenance.

25 YEARS

F. Neal Wiggins, Clarence W. Castle, Oddis J. Baker, Zane R. McNutt and Lawrence B. Howerton.

20 YEARS

Eugene C. Williams, Thomas R. Lemons Jr. and Virl J. Hobson.

PADUCAH

30 YEARS

Robert C. Wenzel, Plant Engineering.

25 YEARS

Harold E. Cook, Crystal O. Mayo and W. B. Ford.



More than 40 persons attended seminar

division death

Thomas A. Herrell, senior draftsman at ORNL, died November 26 at Fort Sanders Presbyterian Hospital. He lived at 3433 Peachwood Road, Knoxville.



Mr. Herrell had been employed since 1955 as a senior draftsman in the Engineering Division. He served in the U.S. Army during the Korean War.

A native of Knoxville, he received his B.S. in engineering from the University of Tennessee.

Survivors include his wife, Betty; son, William; daughter, Linda Hardin; grandson, Char Hardin; and two brothers, Kenneth and Paul.

Burial was at Lynhurst Cemetery. The family requests that any memorials be in the form of gifts to the Carlos Aquaya Fund, West Haven Baptist Church, Knoxville.



Eveart Rosenbalm 'practices' in the field

question box

If you have questions on company policy, write the Editor, **Nuclear Division News** (or telephone your question in, either to the editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.

Job bidding

QUESTION: On October 24, a job bid (A-105) was posted on the ORNL boards. It was for a Level 4—Records and Systems Clerk. Please explain why a file clerk rates such a high level, when Level 4 is the highest a secretary can attain.

ANSWER: Job Bid A-105, a Level 4 Records and Systems Clerk, is a one-of-a-kind position. It is in the Laboratory Director's Office and entails handling a large variety of diverse and sensitive information without benefit of direct supervision. It is the only Level 4 records clerk job. On the other hand, there are a number of higher-level positions in the secretarial family.

QUESTION: I recently correctly predicted who would get a job on the bidding system. She was a friend of the one terminating. I am not opposed to helping friends, but I am opposed to management trying to convince me that everything is on the level on the bidding of jobs. This happens too many times. Is politics not playing too great a role in the JOS?

ANSWER: The Job Opportunity System was established to provide weekly employees with notification of job openings. Since its inception on July 1, 1974, many employees have received career improvements and many more have received visibility for future openings.

While the JOS is not without fault, it has proven to be worthwhile and worth keeping. At the present time, a review is being made of the JOS in an attempt to find problem areas and to make suggestions as to corrections and improvements.

Excludable sick pay

QUESTION: I was off ill a few years ago and was told by someone in the Payroll Department that I was not eligible for "excludable sick pay" in filing my income tax since I am an exempt employee. I find now that he was wrong. Can I go back and claim this and file a 1040X for that time which I was off?

ANSWER: Whether or not you are entitled to a refund is a decision that will have to be made by the Internal Revenue Service. You, however, have the right to file a claim for a refund.

According to the provisions of the U.S. Code Title 26 (Internal Revenue Code) Subchapter B, Section 6511, any taxpayer who has overpaid taxes for any year because of failure to take allowable deductions or because of an overstatement of income, may file a claim for a refund. The claim must be filed within three years from the time the original tax return was filed or within two years from the time the tax was paid, whichever is later.

The claim for the refund should be filed with the Internal Revenue

Service Center where the original tax return was filed. It should be prepared on Form 1040X, which can be obtained from the local office of the IRS. A separate claim should be filed for each year for which a refund is being requested.

ORGDG bicycle policy

QUESTION: When will the plant policy toward bicycles at ORGDG be reviewed? It seems they are not utilized as much at our plant as they are at Y-12 and ORNL.

ANSWER: The present policy of prohibiting the purchase of additional bicycles for use outside of buildings was established by the ORGDG Safety Steering Committee on May 16, 1974. This was done in recognition of the increased hazards due to accelerated construction activities and increased motor vehicle traffic within the plant confines.

This policy will be reviewed as construction work decreases significantly and motor vehicle traffic within the plant is proportionately decreased.

Locking of roto-gates

QUESTION: Why was the recent locking of the roto-gates not announced to Y-12 employees? Why isn't there a phone at the East Gate so people can get out after hours? What is one who is leaving after working hours supposed to do?

ANSWER: Y-12 Superintendents and ORNL Directors at Y-12 had been consulted prior to establishing the revised exit gate operating hours. They were also advised, well in advance of effective dates, concerning the revised schedule for the gates to be opened and were asked to inform employees who needed this information.

In retrospect, it would have been better if we had publicized this change more widely. We regret any oversights and inconveniences it may have caused employees.

Telephones are not available "at gates," but generally are available in adjacent buildings. However, in the interest of everyone's time, employees (or their supervisors) are urged to call the Plant Shift Superintendent (3-7172) before leaving the job, preferably well in advance of the exit time.

patents granted. . .

To Ed D. Hudson and Merrit L. Mallory, both of ORNL, for "Method of Enhancing Cyclotron Beam Intensity."

To John G. Banker and Hubert L. Wigginton, both of the Y-12 Plant, for "Method for Melting Metals to Reduce Contamination from Crucibles."

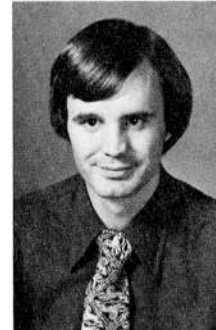
Five promotions at ORGDG



Bolling



Bolton



Kelly



Kerr



Womack

Five new supervisors have been named at ORGDG: John D. Bolling and G. S. Kelly, Operations; Dennis E. Bolton, Bert W. Kerr and James E. Womack, Fabrication and Maintenance.

Bolling, a native of Oak Ridge, is attending the University of

Tennessee. Before joining Union Carbide three years ago, he worked with Mueller Steam Specialty, and Converse Rubber Co.

He and his wife, the former Rebecca Norton, live at 216 West Fairview Road, Oak Ridge. She is in ORNL's Computer Sciences Division.

Bolton, who was born in LaFollette, has been at ORGDG more than a year. He attended National Joint Apprenticeship and Training, studying industrial electricity.

Mrs. Bolton is the former Mary Crabtree, and the couple lives at 510 Farris Lane, LaFollette. They have four children, David, Lisa, Debbie and Curtis.

Kelly was born in Wartburg, and holds a B.S. degree in industrial technology from Tennessee Technological University.

He lives at Route 1, Wartburg, and worked with Shemco Mining Company before joining Union Carbide last year.

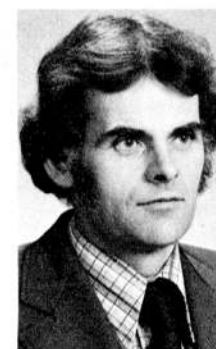
Kerr was born in Auburn, Calif., and joined Union Carbide in 1975. He has an A.A. in engineering from Sacramento City College, and worked with Daniels Construction Company, Allied Maintenance Company and Pacific Gas and Electrical Co. before coming to the Oak Ridge area.

He and his wife, Rebecca, live at Route 1, Cedar Lane, Lake City. They have two children, Mary and Bert II.

Womack is a native of Sevierville, and has attended classes at Roane State College. He was with the Oak Ridge Fire Department before joining ORGDG in 1975.

Mrs. Womack is the former Gladys McPeters, and they live at 107 Prairie Lane, Oak Ridge. They have two children, James and Robert.

Named to Fusion Energy posts



Haselton



Sheffield

The appointments of Hal H. Haselton and John Sheffield to section head positions in ORNL's Fusion Energy Division have been announced by O. B. Morgan, division director.

Haselton will serve as head of the Plasma Technology Section, replacing Morgan, who was appointed director of the Fusion Energy Division in November. Sheffield, who will head the Tokamak Experimental Section, replaces Lee A. Berry, recently appointed director of ORNL's fusion program.

Haselton, a native of Wilmington, N.Y., joined Union Carbide in 1973 in ORNL's Physics Division. He joined the Fusion Energy Division in 1974, and has served as a group leader in the Plasma Technology Section since 1976.

Haselton was a participant in the Fusion Energy Division's ORMAK neutral beam injection experiments and project manager for the development of neutral beam injection systems at ORNL for the Princeton Large Torus (PLT).

He received his B.S. degree from Eastern Nazarene College, Quincy, Mass., and his M.S. and Ph.D. degrees from the University of Massachusetts. He lives at 1549 Coleman Road NE, Knoxville.

Sheffield came to Union Carbide in September, 1977, from the United Kingdom Atomic Energy Authority's Culham Laboratory in Oxfordshire, England, where he was a principal scientific officer. At Culham, Sheffield was responsible for injection heating in the Joint European Torus (JET) Project.

A native of England, Sheffield received his B.S. degree from Imperial College, his M.S. degree from Northern Polytechnic in London and his Ph.D. from the University of London. From 1966 until 1971, he was an assistant professor in the Center for Plasma Physics and Thermonuclear Research at the University of Texas.

Sheffield and his wife, Dr. Dace Sheffield, live at 84 Valley Forge Drive, Oak Ridge. They have two sons.

ORGDP Development and training programs draw participants



HUMAN RELATIONS—Kathy Coleman addresses a class in human relations at ORGDP. The 20-hour course is also taught by Robert E. Seyfried and Michael C. Willard.

Several employees have completed various training programs conducted and coordinated by the Employee Relations Division at ORGDP.

Basic Human Relations

The Human Relations Training Program, which has recently been revised, concentrates on group dynamics, communication skills and attitudes. This "Working With People" program pulls together group ideas and experiences to offer solutions to routine problems encountered during the work day. Various case studies, films, role playing exercises, are used to stimulate class discussion. Instructors for this 20 hour program are Kathy D. Coleman, Robert E. Seyfried and Michael C. Willard. Employees who have recently completed the course are:

Richard B. Alderfer	S. Kurt Delcour	Robert F. Hyland	William H. Schaefer
Barbara J. Anderson	Kenneth D. Delius	Becky Jennings	Robert P. Norton
Tim Baer	John C. Dodd	Jerry R. Hopkins	Larry A. Owens
Lee R. Ballard	Joseph B. Dooley	R. Ed Housley	Phil E. Parrett
Leonard K. Barding	John R. Drake	Amos A. Inklebarger	Janis H. Paylor
Ron G. Bateman Jr.	Michael J. East	Jesse E. Johnston Jr.	Michael R. Powell
Marcia L. Beahm	Lou T. Edwards	Thurman E. Johnston Jr.	Blynn E. Price
Jewell F. Beasley	Ross J. Evans	Russell A. Kavanagh	Paul F. Reeverts
Gwen T. Black	Michael M. Farmer	Matthew M. Kelleher Jr.	Larry M. Rosenbaum
James E. Bluford	Fred F. Felte	Clarence R. Kirkpatrick	Steve K. Rowell
Shirley E. Boles	Kenny L. Fite	Pamela K. Knight	Gary Sanders
John D. Bolling	C. Lee Ford Jr.	Charles T. Kring	Wolfgang J. Sanio
Bryant B. Bowden	Kevin H. Funk	Ralph E. Lawley	William J. Scheib
Tommy A. Bowers	David C. Giles	Dean K. Little	James W. Smith
James K. Bryson	Robert D. Gilmore	Jackie L. Loveday	Vzonda Smith
Joseph Burch	Barbara H. Graves	Renchel P. Lowery	Barbara E. Srite
Michael M. Burgess	Janette B. Greene	Leo K. Lugten	Bowndn W. Tomlinson
David L. Burton	Jack Gresham	Robert L. McDougal	Guy Turner
Fred Campbell	Albert F. Griffin	Evelyn D. McKamey	Wendell L. Turner
William B. Chambley	Donald W. Guldán	Elsie L. McKeethan	Richard K. Wagenblast
Myra S. Chapman	Troy D. Harris	Karen B. McLaughlin	David L. Weishaar
Randy E. Collins	Charles H. Haynes	Wayne L. Maddox	Allen E. Williams
Frank E. Copeland	Anthony C. Heitzman	John R. Marshall	D. Ray Williams
Kevin L. Copple	Jama B. Hill	Gerald C. Melton	Joseph G. Williford
Michael A. Cox	Kenneth W. Hill	Ralph M. Moretz Jr.	Sammie D. Wilson
Johnny H. Crabtree	Daniel J. Hinton	Dwight L. Morrow	Marilyn B. Wright
Jimmy K. Crawford	Virl J. Hobson	Michael E. Mullins	Brenda S. Yarborough
Lawrence E. Creech	Patricia E. Holland	Jennifer V. Nolte	Richard C. Snyder
Anna C. Crowe	Thomas E. Holland	Arnold L. Johnson	Kenneth W. Stephens
Leroy E. Crowe	John E. Arrowood	Verla B. Johnson	Andrew J. Szady
John S. Curny	Charles L. Caldwell	E. Howard Kelley	Henry Webber
Elaine M. Curtis	Karren B. Cochran	John G. Million	Roy A. Whitaker
Steven J. Dekanich	Robert B. Fitts	Robert C. Orrin Jr.	

ICS Selective Training

The Selective ICS Program is one designed to allow individuals to advance with their training and development at their own pace. The Human Resources Department coordinates a planned study program between ICS and the employee. Programs are offered in the building trades, business management, engineering, drafting, electronics, and other subjects which are job related. The following employees have enrolled and/or recently completed course work:

Willene G. Allen	David D. Garrett	John H. O. Purnell
James S. Abercrombie	Charlotte O. Glenn	Lloyd L. Quarles
Jeffrey L. Bailey	Bennie L. Goodman	Bobby R. Raines
Fannie A. Ball	Earl T. Hauther	Ruth P. Renfro
Allan C. Beddingfield	Mary F. Hillard	Donna M. Rhoads
Patsy H. Begley	Frank E. Horton	Nonavea B. Rodgers
David M. Best	Judy A. Humphrey	Richard R. Russ
Kenneth P. Brown	Kerry R. Isabell	Gary L. Seeber
William C. Bryan	William D. Jackson	Clay H. Sherlin
Dannie D. Byrd	Gill E. Jessee	Virgil J. Silver
Glynda M. Cantrell	Larry W. Johnson	Timothy W. Smith
William H. Caylor	Wilma C. King	Jackie J. Stephens
Donald R. Chandler	Mary K. Oakes	Dessie B. Stewart
Dorothy W. Coffey	Patricia M. Long	Harlan R. Thomas
Linda G. Conger	Robert E. McCoy	Tommy D. Thompson
Willard Creekmore	Tommy J. McCullah	Russell O. Thornton
Bertha F. Daniels	Steve E. McGhee	Truman R. Trotter
Raymond A. Dotson	Charles G. Miller	Ray W. Wear
James A. Earls	Paul E. Miller	Anna W. Wells
Mitchell R. Ellison	Shirley M. Myers	Rodger K. Witt
Kenneth O. Evans	Linda D. Nelson	Paul E. Woody, Jr.
Ralph H. Ford, Jr.	Steve C. Osborne	Elizabeth H. Young

Technical Presentation

The Technical Presentation Program is a new program that reviews the principles of effective oral presentation. It provides the opportunity for participants to practice by actually giving a presentation. The program focuses attention on the problems and difficulties of oral technical presentation and suggests appropriate methodology. Instructor for this 16 hour program is William D. Joyner. Employees completing the course are:

Earl A. Allred	Don A. Keith
James M. Barnes	Steve A. Larson
Hop Boyd	Dean K. Little
Kendall L. Brady	Leo K. Lugten
M. Martha Brown	Curtis G. Holmes
Robert D. Bryant	James L. Lawhorn
Lynn J. Degenhardt	Bernard Niemann
Joaquim L. Heck	Carl B. Smith
Ted C. Helms	George F. Pierce
Donald D. Cannon	John C. Salyers
Bill S. Denton	Charles V. Southard
David T. Duncan	William Q. Walter
Richard W. Hayes	Fred R. Williamson
Leslie E. Johnson	

LIFE PRESERVERS—Spare tire, ice chest with clamp-on lid, gallon thermos jug—all are good emergency life preservers. A person in trouble in the water can stay afloat with one of these until help arrives.

Secretarial Seminar

The Secretarial Seminar is a new three and one-half day program. Topics such as preparation of correspondence, report preparation, frequently used forms, office equipment, telephone techniques, and most aspects of the UCC-ND Office Guide are covered by 15 instructors from various divisions within ORGDP. The program coordinator is William D. Joyner. Recent employees graduating from the class are:

Doris A. Alcorn	Doris L. Clark
Judith D. Arms	Peggy E. Collier
Marcia E. Barton	Doris C. Crowell
Sandy L. Bauch	M. Chris Gilman
Doris D. Bishop	Ramona M. Halburnt
Shirley E. Boles	Jackie H. Hair
David W. Brown	Geneva H. Higginbotham
Lillian R. Brown	Helen M. Hinkle
Judy A. Bryant	Cheryl H. Hitchcock
Mary M. Buell	Virl J. Hobson
Glynda T. Cantrell	Nell M. Jago
Linda W. Choate	Janie G. Rice
Patricia T. Kelly	Phyllis Roberson
Judy B. McBee	Carolyn M. Rule
Florene McGhee	Betty S. Salada
Terry L. Moore	Melba B. Scarbrough
Doris N. Mullins	Brenda L. Smith
Judith C. Nelson	Dessie B. Stewart
Donna B. Parker	Betty R. Tuck
Geneva R. Parker	Dianne H. Winebarger
Sherry I. Parten	Donna D. McGregor
Kathy L. Young	Marsha G. Morgan
Carolyn W. Pipkin	



TECHNICAL PRESENTATION PROGRAM—William D. Joyner lectures in the new technical presentation program, reviewing the principles of effective oral presentation.

Supervisory Training

The Supervisory Training Program is for both experienced and relatively inexperienced supervisory personnel. The program is designed to acquaint supervisors with modern management techniques, first aid training, primary plant operations, and the staff support services at their

disposal. The duration of the program is approximately four weeks and includes in-class presentation, plant tours, and outside assignments. Instructor for the course is Michael C. Willard. Those employees completing the course are:

David M. Andrews	Stanley B. Harris	Ralph M. Moretz Jr.
Carson E. Baldwin	James B. Hill Jr.	James O. Nations Jr.
Ronald L. Bayless	Kenneth W. Hill	Alfredo S. Nieto
Frank N. Bensey Jr.	Daniel J. Hinton	Steven P. Parks
Robert K. Brooks	Ronald L. Hooks	Howard A. Phillips
Bobby L. Carter	James D. Hunter	James L. Ramsey
Randall E. Collins	Ronnie F. Jackson	Kenneth R. Shrull
William J. DeRossett	Michael L. Johnson	Willie F. Tiller
James D. Dillon	Robert A. Kite	Elbert P. White
Raymond J. Fraser	Jacqueline L. Kracker-Taylor	George E. Proffitt
James L. Fritts	Carol R. Glover	Esco J. Raines
Paul D. Baker	Melvin H. Hayes	Michael S. Ratledge
James E. Bluford	Harold C. Jones	David A. Schlandt
John D. Bolling	Lyndell Loving	Jackson D. Stackpole
Dallas R. Fritts	Joseph J. Plante	John Ward
Ray B. Gann	Renchel P. Lowery	
Jack L. Hannah	Elsie G. McCarthy	



Heads of U.S. Groups participating in the Nuclear Structure and Decay Data Evaluation Network. Standing left to right: N. E. Holden, Brookhaven National Laboratory; E. G. Fuller, National Bureau of Standards, Washington, D.C.; R. L. Heath, Idaho National Engineering Laboratory; C. M. Lederer, Lawrence Berkley Laboratory. Seated: S. Pearlstein, Brookhaven National Laboratory; Faye Cyzenberg-Selove, Department of Physics, University of Pennsylvania; and W. Bruce Ewbank, Nuclear Data Project, ORNL.

IAEA seeks international system for nuclear structure, decay data

More than 40 delegates and U.S. and foreign observers participated recently in the meeting of the International Atomic Energy Agency's (IAEA) Advisory Group on Nuclear Structure and Decay Data Evaluation at the DOE Training Center in Oak Ridge. The week-long conference was hosted by ORNL.

The purpose of the meeting was to establish a common basis for nuclear structure and decay data evaluation and to form an international network for carrying out such evaluations. Fred E. Bertrand, deputy director of the Nuclear Data Project in the ORNL Physics Division, was the local coordinator.

According to Bertrand, "Evaluated data are used by scientists and engineers from many different fields to promote understanding of the atomic nucleus, to guide further applications of nuclear energy, and to assess the effects of nuclear technology on the environment."

The discussions—conducted with simultaneous translation between English and Russian, included procedures for exchange of reference and numeric data, standards for evaluation of nuclear properties, distribution of evaluation responsibility among participants in the international network, and the establishment of a procedure for the review of evaluations.

During the week preceding the meeting, many attendees also participated in workshops for new and experienced data evaluators conducted by the staff of the Nuclear Data Project.

He is a director of the American Industrial Hygiene Association and also is one of 14 directors on the American Board of Industrial Hygiene, Inc., the certifying body for the industrial hygiene profession. He is past president of both the American Academy of Industrial Hygiene and the Tennessee Valley Section of IAHA.

Bolton and his wife, Martha, both natives of Hazard, Ky., live at 106 Norris Lane, Oak Ridge. They have three children: Fred, Lisa and Patricia Evans, an inspector in Technical Services, ORGDP.

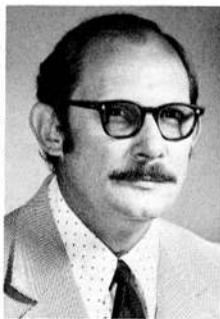
Newell Bolton goes to Corporate office

Newell E. Bolton, head of the Industrial Hygiene Department at ORNL, has been named associate director of Industrial Hygiene for Union Carbide Corporation, effective January 1, 1978.

In this new assignment, Bolton will assist the corporate director of Industrial Hygiene, Paul W. McDaniel, in the development and implementation of industrial hygiene programs covering eight Union Carbide divisions operating at more than 70 locations in the United States. These programs are designed to ensure that significant chemical and physical stresses are identified, evaluated and controlled to prevent adverse health impacts on employees. Bolton will also participate in the reorganization of the Corporate industrial hygiene program.

Bolton joined Union Carbide in 1952. He has been responsible for industrial hygiene at ORNL since 1961, when the department was established within the Health Division.

Bolton received his B.S. degree in chemistry in 1951 from the University of Georgia, where he also has done graduate study.



Russian translator at work in booth



Booths for both Russian and English translation

wanted...



ORGDP

SHARE RIDE from Maryville to Portal 2 or 3, via Highway 95, 7:45-4:15 shift. Richard Anderson, plant phone 3-9548, home phone Maryville 983-3389.

JOIN CAR POOL from West Hills area from vicinity of new Bearden Junior High School to Portal 2, 8-4:30. Ira Kaplan, plant phone 3-3325, home phone 693-5135.

ORNL

CAR POOL MEMBERS from areas of West Outer, Waddell, Pennsylvania or Hillside, Oak Ridge, to East Portal, 8:15-4:45. Tom Burnett, plant phone 3-6939, home phone 483-1975.

JOIN CAR POOL from Berkshire Boulevard and Broadacres, Powell, to West Portal, 8-4:30. Zee Trotter, plant phone 3-6434, home phone 947-6706.

RIDE or JOIN CAR POOL from Tabor Road, Oak Ridge, to East Portal, 8-4:30. Frances East, plant phone 3-1844, home phone 483-1677.

RIDE or JOIN CAR POOL from Lakebrook Boulevard and West Hill Village area, West Knoxville, to any portal, straight days. Guven Yalcintas, plant phone 3-1368, home phone 584-2411.



Alex Zucker

patents granted...

To Clyde D. Watson and Bradley S. Weil, both of ORNL, for "Method for Shearing Spent Nuclear Fuel Assemblies."

ORNL

JOIN CAR POOL with nonsmokers from area of Burnham Woods, Fairview Apartments or Wilderness Trace, Oak Ridge, to East Portal, 8-4:30. John Alexander, plant phone 3-1967, home phone 482-5359.

recreationotes

Carbide bowling. . .

C League. . .

The Mini-Strikes hold only a one point lead in the Y-12 "C" League over the Rounders. John Johnson continues to hold the series high with a 696.

Classic League. . .

The Splinters moved into first place this week holding a two point lead over the Eightballs. High scratch series was won by Sewell Brown with a 605. The Eightballs took high game with a 1078 handicap.

K-25 Tuesday. . .

The City Slickers continue to hold an outstanding lead in the K-25 Tuesday Night League. T. E. Zava scored the high weekly series with a 574 scratch. J. H. Peer had a 226 scratch for the game weekly high.

K-25 Wednesday. . .

The Planners have extended their lead by 4-1/2 points this week in the K-25 Wednesday Night League. The weekly prizes went to C. A. Carmichael for high game with a 242 and Joseph Bryan's 635 for high series.

Family Mixed. . .

Double Trouble moved back into first over the Oops in the Carbide Family League. Harold Zang's 514 and Tillie Plaza's 568 scratch series were highs for the week.

Carbide Shifters. . .

The 3 Fuds & A Stilly lead the Carbide Shifters League over the 2+2. Frank Hatmaker rolled a 220 scratch for the men and Jan Varnadore rolled a 207 scratch game for the women.

ORGDP Women's. . .

The Uptowners remain in first place by eleven points in the ORGDP Women's League. Alice Guffey rolled the high scratch game of the week with a 216. High scratch series was taken by Elaine Griffies with a 531.

ORNL A. . .

The Zots have been overthrown by the Dynamics in the ORNL "A" League holding an eight point lead. Burgess, for the Zots, rolled a 657 handicap series, while the Woodchoppers' Steel had the high game with a 220 scratch.

ORNL C. . .

The Damagers regained the lead over the Alley Rads during the roll-off which was held on November 16th. The Cellar Dwellers had the high team series with 2943.

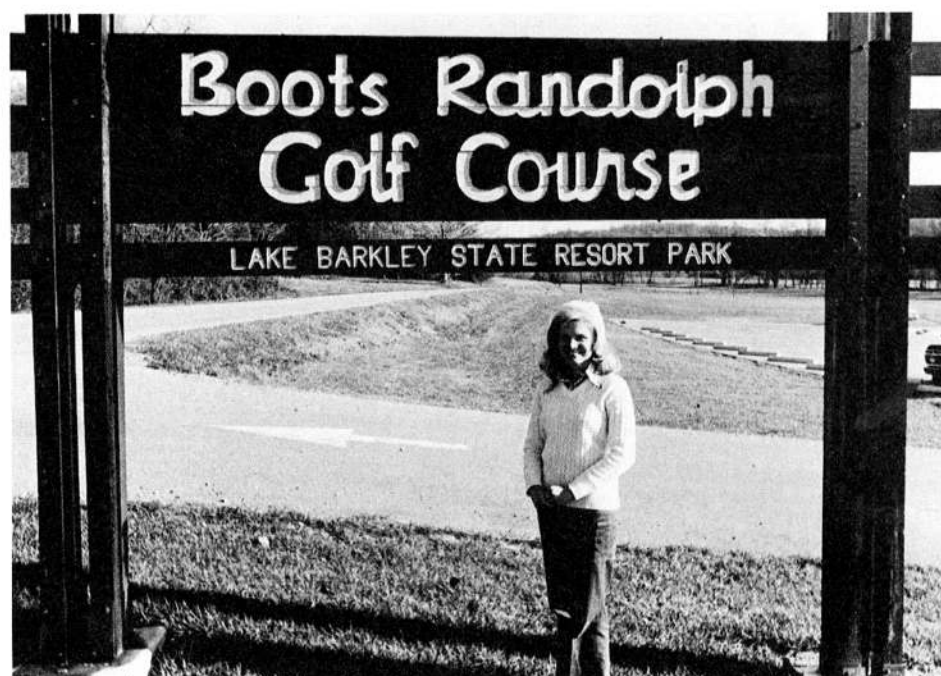
ORNL Ladies. . .

The Avengers tied the Mousechasers for first place on November 9. Laura Walker rolled the high scratch series with a 537. The Avengers topped their team series with a 2390 handicap.

Monday Mixed. . .

The Four Eagles continue to lead the league with an eight game advantage over the Alley Cats. Women's high series scratch honors went to Sandy Collins who took first place with a 550 series helped out by a 211 game.

Editor's Note — Don't be selfish with your safety tips! Call the Nuclear Division News Office, and tell us your stories or hints on safety.



BEFORE TEE OFF—Mary Kosinski, wife of Gus, pauses at the entrance of the Boots Randolph Golf Course before teeing off at a recent Paducah scrabble. Mary and team members, Marty Curtis, J. B. Sims and Carl Walters placed high in a recent competition, scoring a par 72.

Paducah golf. . .

Amid the blustering November wind, some 50 Paducah golfers welcomed the plant's scrabble held at Barclay Lake. Jake Piercy and team members C. W. Cope, Ed Bazzell and Norma Smith obviously overcame all handicaps, natural or otherwise, to take the scrabble with a four under par 68. At three under was team captain Dave Barclay, supported by Dave Dodson, Bob Siegfried and Toni Piercy. In the number three seat were Archie Miller, Jerry Neale, Coleman Shelton and Dutch Bryant. Fourth place honors went to Harry Colbert, Manley Fortune, Tommy Pierce and Pat Karr. The number five team consisted of Elvin Kurhn, Buddy Varble, Pap Reed and Chan Hale.

Skeet league. . .

The Carbide Skeet League had three winners during the month of October all from X-10. Roy Hicks took top honors with a 47.786, followed by D. N. Fry with a 47.60 for second, and Helen Raaen, with a 45.548 for third.

Local 166 party

The Christmas party and dance for Atomic Trades and Labor Council's Local 166 will be held at the Civic Center in Oak Ridge on Saturday, December 17. Festivities begin with a social hour from 8 to 9 p.m. and the dance will be from 9 to 1 a.m. All Local 166 members are invited to come and bring a guest.

Application for Tickets

To

Christmas Parties

FOR CHILDREN OF OAK RIDGE UNION CARBIDE EMPLOYEES
(AGES 2-10 ONLY)

THURSDAY, DECEMBER 22

Plant
Employee's Name
Home Address
Plant Address
Number of Tickets (Children)
Number of Tickets (Adults)

—CHECK TIME PREFERRED—

Thursday, December 22 11 A.M. 1 P.M.
Only 3 P.M. 5 P.M.

Please check first and second choice (write in space "1" or "2") as only a limited number of tickets will be issued for each party. Preference will be given early applicants and if tickets for first choice are exhausted, tickets for second choice will be issued.

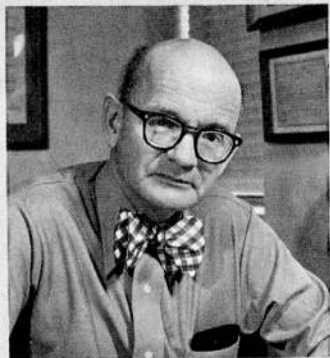
Return this form, properly and completely filled in, to the Carbide Recreation Office, Building 9711-5, Stop 1, Y-12 Plant. Please apply for tickets before December 16. The required number of tickets will then be mailed to parents at their home or plant addresses.

SAFETY GREETINGS

*"Safety to all, and to all
a Halleluyear"*



HOLIDAY POSTER—Lacy Keele, Y-12's Plant Laboratory, again has designed the safety poster for the holidays, to be used throughout the plant.



medicine chest...

Varicose veins; Coronary bypass

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "Medicine Chest," where he answers questions from employees concerning health matters. Questions are handled in strict confidence, as they are handled in our "Question Box." Address your question to "Medicine Chest," Nuclear Division News, Building 9704-2, Mail Stop 20, or call the news editor in your plant.)

QUESTION: "I have heard that operations for varicose veins are now being discouraged because a person who has them removed will be "out of luck" if he ever requires a coronary bypass operation. What would you advise a person who has varicose veins?"

QUESTION: "Are coronary bypass operations any good? They sure cost enough!"

ANSWER: These two questions can be answered together since they are closely related.

The saphenous vein is a large superficial vein which runs down the inner aspect of the thigh and lower leg and is the principal source of graft material for reconstruction or bypass of blocked arteries. The cause of obstruction is almost always due to "hardening of the arteries" called atherosclerosis. Other graft materials—some of them plastic—have been used, but there is almost universal agreement that a reasonably healthy saphenous vein is best. Even if the vein is varicose, portions of it can usually be used.

Advising a patient on whether or

not to have his (or her) varicose veins tied and then stripped out of the leg is not easy. If they are severe, they can be unsightly and cause muscular fatigue, swelling and sometimes ulcerations near the ankle. Unfortunately, sometimes the varicose vein has developed because of partial, or even complete obstruction of the deep venous return of blood via the femoral vein and its tributaries. The most common cause of such obstruction is a previous episode of thrombophlebitis, an inflammation of the lining of the vein.

Advice not easy

When the deep vein is obstructed, the blood returning to the heart from the leg has to come back through the superficial saphenous vein. If the superficial vein is grossly enlarged and tortuous because it is performing a double job, then it makes no sense to cut it out. Tragically, a few people have had their varicose veins removed only to find out they really needed them. The consequence was more severe swelling and pain than before the operation.

In an editorial in the **Journal of the American Medical Association**, June 20, 1977, Dr. Norman R. Hertz of the Cleveland Clinic, Cleveland, Ohio, said, "Considering the unsurpassed importance of the saphenous vein as an arterial substitute, its removal—either for cosmetic purposes or as a hazy, therapeutic trial to treat unexplained leg pain or edema (swelling)—has become an anachronism."

Dr. Hertz went on to say that unnecessary removal of unsightly varicose veins may be only an "irretrievable professional error" for most people, but for those who require an arterial graft later in life, it could be a "serious, if not mortal" injury.

"Irretrievable error"

At present, coronary bypass surgery is overrated and performed at exceedingly high cost. In this procedure, obstructed coronary arteries are first found by using coronary arteriography. Arteriography utilizes an opaque dye which is rapidly injected into the large coronary artery near the aorta. Its progress through the various branches is followed by a special movie X-ray procedure called "cine." After the blockage has been located, a piece of saphenous vein is sewn into the artery in front of and behind the obstruction, creating a bypass around it. Since vessels used for grafts must be similar in size, sections of vein may have to be taken from multiple locations.

The original justification for bypass surgery was relief of intractable angina pectoris (chest pain caused by coronary heart disease). The operation has been successful, and many patients who were totally disabled before surgery have had excellent relief. Unfortunately, however, the number who return to work has been disappointing. In recent years, the indications for such a radical operation have been expanded to include the hope of

prolongation of life and the prevention of future heart attacks. So far, little evidence exists that a bypass does either of these things.

Costs \$12,500

In 1977, it has been estimated that 70,000 coronary artery bypass grafts, each costing about \$12,500, will be performed. The operative mortality in medical centers with experienced surgical teams is about 5 percent and deaths due to medical causes while in the hospital is about the same.

One has to perform a personal risk-versus-benefit analysis before he (or she) decides to have varicose veins removed in both legs. Having the procedure done in only one leg is not of such major concern, although it reduces the available supply of vein material to use. The likelihood of ever needing a vein graft is relatively small. However, with better surgical techniques, coronary bypass surgery may begin to prolong lives. Bypass and direct grafting into blocked arteries in the legs is now highly successful. There is no way of determining who, when still reasonably young, will eventually need surgery.

Prudence dictates conservatism! Don't waste your saphenous veins even though varicose, unless absolutely necessary!

about people...

Thomas A. Lincoln, M.D., director of ORNL's Health Division, has been elected to fellowship in the American Academy of Occupational Medicine. To be eligible for fellowship, one must be certified by the American Board of Preventative Medicine in the field of occupational medicine; must present evidence of professional attainment in the specialty of occupational medicine; and the application must meet the approval of at least five members of the Board of Directors.

retirements...



James A. Andrews
Building and Grounds
Y-12
24 years service



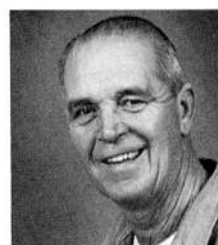
Glenn A. Atchley
Y-12 Guard Department
33 years service



Frank W. Atkinson
Y-12 Electrical
23 years service



Margaret C. Baker
Y-12 Chemical Services
34 years service



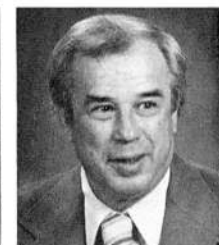
William W. Bradshaw
Y-12 Electrical
26 years service



Earnest L. Brown
Security, Plant Protection
ORGDP
33 years service



John R. Carriger
Y-12 Electrical
33 years service



Woodrow W. Chilcoat
Y-12's A-Wing Shop
27 years service



Clyde Cook
Y-12 Fire Department
32 years service



Charlie H. Crass
Y-12 Inspection
27 years service



Harold D. Culpepper
Y-12 Engineering
33 years service



William E. Dunlap
Y-12 Engineering
25 years service



Ruth H. Gallardo
Y-12 Processing
32 years service



Joe P. Harvey
Y-12 Engineering
31 years service



Theodore F. McCuen
Purchasing
27 years service



Joe G. McKinney
Y-12 Machine
Maintenance
9 years service



Hugh L. Montooth
Y-12 Guard Department
33 years service



Wilber C. Olka
Y-12 Dispatching
31 years service



Joseph S. Schrimsher
ORGDP Maintenance
29 years service



Charles E. Sellers
ORGDP Maintenance
32 years service



Clyde R. Sharp
Y-12 Maintenance
26 years service



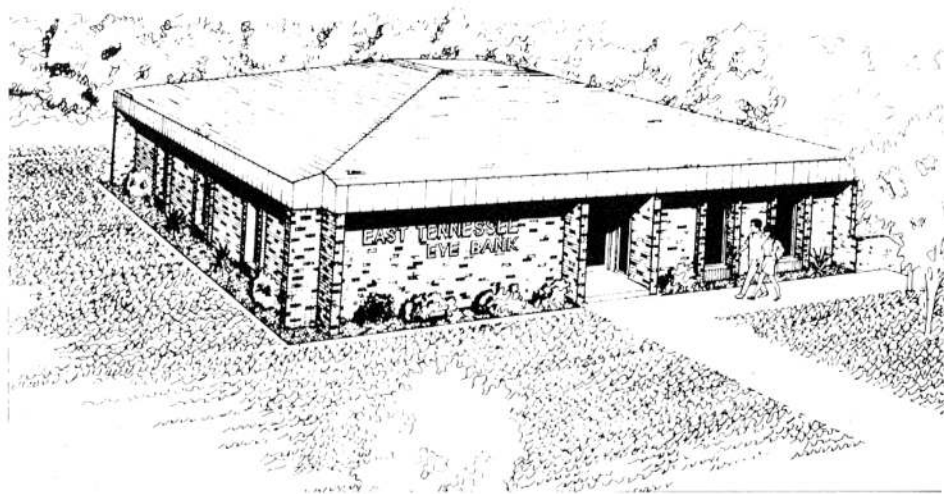
Wadie Z. Spence
ORGDP Operations
33 years service



A. D. Toon
ORGDP Operations
32 years service



Frances O. Ware
Technical Services
ORGDP
29 years service



SERVES AS PRESIDENT—Lon W. McNeil stands before the East Tennessee Eye Bank in West Knoxville, serving as its president. His son, Greg, designed the structure, which was dedicated in ceremonies last month.

Paducah Plant sets dance December 16

The Paducah Plant has set its Christmas dance for Friday, December 16, at the Paducah Civic Center. FLIGHT 602 will provide music for the "Merry Christmas Ball," featuring Terry Mike Jeffrey.

The dance begins at 9 p.m., and the doors will open at 8. Tickets are \$7 per couple and available from the following persons: F. Van Deven, Building C-720; Brenda Stokes, C-710; Curtis Chenault, C-400; Ron Haugen, C-743; Darlene MacPherson, C-100; Carl Page, C-720; and Bill Switzer, C-355.

Dress is semi-formal and door prizes will be awarded.

holidays coming. . .

More holidays are coming for Nuclear Division employees. Friday, December 23, and Monday, December 26 are the official days off for Christmas, and Monday, January 2, will be our official "New Year's" holiday.

No employee will be required to be at work unless his/her presence is required by continuous operations or plant security.

CAT LITTER — Some drivers carry a bag of cat litter in their car trunks. The gritty litter can be used to give a car increased traction in snow or on ice. It's more easily obtainable than ashes or sand, and it's conveniently packaged.

Eye bank

(Continued from page 1)

"so we're going out for everyone."

Merely signing the driver's license is not good enough, he adds. **YOU MUST SIGN THE "EYE WILL CERTIFICATE" AND GET YOUR SIGNATURE WITNESSED.** The Eye Bank will provide you with a red sticker for your driver's license to make sure that your wishes are fulfilled at the time of your death.

Many morticians in the area have been trained in the removal of corneas and their safe storage and transport to the Bank. Further instructions are also planned.

Eyesight restored

There are 53 persons in this area who have sight who had never seen before, and a great deal more have overcome incurable eye ailments, thanks to modern ophthalmology and the Eye Bank.

A recent visit to the Eye Banks' new office revealed an interesting event. Corneas had become available and the first person on the priority list could not be located. After hours of search the patient was finally found and rushed to the hospital. The successful transplant was done immediately. Drs. William R. Sullivan and David G. Gerkin are medical directors for the eye bank; Sullivan serves as the cornea transplant specialist.

McNeil's main interest at present is that enough "eye wills" are available so that the transplant waiting list can be eliminated. "It's a mighty nice thing to do for somebody else," he says.

safety scoreboard

Time worked without a lost-time accident through December 1:

Paducah	132 Days	1,650,000 Man-Hours
ORGDP	1 Day	46,000 Man-Hours
Y-12 Plant	289 Days	8,763,000 Man-Hours
ORNL	219 Days	4,800,183 Man-Hours

Three promotions at Paducah

Three promotions have been announced at PGDP: Marty Curtis has been named a safety analyst in the Employee Relations Division; William G. Halicks an engineer; and Edward W. Kincer has been promoted to a general supervisor in the Fabrication and Maintenance Division.

Curtis received a B.A. degree from Transylvania College and has done graduate work at the University of Kentucky. He joined Union Carbide in February following employment with Webb and Webb Attorneys. He is married and has two sons.

Halicks is a veteran of the U.S. Navy and a native of Paducah. He joined Union Carbide this year, after receiving an associate degree from Paducah Community College and a B.S. in mechanical engineering from the University of Kentucky. He lives on Terremont Drive, Paducah.

A native of Lenoir City, Tenn., Kincer joined Union Carbide in 1950 at ORGDP, and transferred to Paducah in 1952. He has attended Paducah Community College. He and



Curtis



Kincer



Halicks

his wife, Betty Ruth, live at Route 1, Hickory, Ky., with their daughters, Rhonda and Marla. Their son, Danny, lives in Oak Ridge.

Named head of Earth Sciences



Tamura

Tsuneo Tamura has been appointed head of the Earth Sciences Section of the Environmental Sciences Division at ORNL.

He is a native of Hawaii and received a B.S. degree in chemistry from the University of Hawaii, his M.S. and Ph.D. degrees in agricultural-soils from the University of Wisconsin.

Prior to joining Union Carbide in 1957, Tamura worked at the Connecticut Agricultural Experiment Station and for Westinghouse Electric Corporation.

He is a fellow of the American Association for the Advancement of Science, and, in 1976, was honored by Union Carbide Corporation as one of its "technology experts."



UNION CARBIDE CORPORATION

NUCLEAR DIVISION

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